WHAT IS CLAIMED IS:

1. A pharmaceutical composition, comprising a GLP-2 peptide selected from a vertebrate GLP-2 or an intestinotrophic analog of a vertebrate GLP-2 which analog differs from a vertebrate GLP-2 in that it incorporates at least one amino acid addition, deletion, substitution or an amino acid with an N- or C-terminal amino acid blocking group, and a pharmaceutically acceptable carrier.

2. A pharmaceutical composition according to Claim 1, wherein the GLP-2 peptide is of the formula:

R1-[Y]m-His-Ala-Asp-Gly-Ser-Phe-Ser-Asp-Glu-Met-Asn-Thr-aa1-Leu-Asp-aa2-Leu-Ala-aa3-aa4-Asp-Phe-Ile-Asn-Trp-Leu-aa5-aa6-Thr-Lys-Ile-Thr-Asp-[X]n-R2

wherein aa1, aa2, aa3, aa4, aa5, and aa6 refers to any amino acid residue, and:

X is one or two amino acids selected from group III;
Y is one or two amino acids selected from group III;
m is 0 or 1;
n is 0 or 1;
R1 is H or an N-terminal blocking group; and
R2 is OH or a C-terminal blocking group.

3. The pharmaceutical composition of Claim 2, wherein:
aa1 is selected from group IV;
aa2 is selected from group I or II;
aa3 is selected from group I;
aa4 is selected from group III;
aa5 is selected from group IV;
aa6 is selected from group II or III;

4. A pharmaceutical composition according to Claim 3, wherein the GLP-2 peptide has the amino acid sequence:

R1-[Y]m-His-Ala-Asp-Gly-Ser-Phe-Ser-Asp-Glu-Met-Asn-Thr-Ile-Leu-Asp-Asn-Leu-Ala-aa3-Arg-Asp-Phe-Ile-Asn-Trp-Leu-Ile-Gln-Thr-Lys-Ile-Thr-Asp-[X]n-R2.

5. A pharmaceutical composition according to Claim 1, wherein the GLP-2 peptide is a vertebrate GLP-2.

6. A pharmaceutical composition according to Claim 5, wherein the GLP-2 peptide is rat GLP-2.

7. A pharmaceutical composition according to Claim 5, wherein the GLP-2 is human GLP-2.

8. A pharmaceutical composition according to Claim 1, wherein the GLP-2 is present in an intestinotrophic amount.

9. A method for promoting growth of bowel tissue in a patient in need thereof, comprising the step of delivering to the patient a pharmaceutical composition as claimed in Claim 8.

10. A pharmaceutical composition according to Claim 1, wherein the GLP-2 peptide is present in an amount effective to promote the growth of pancreatic islets.

11. A method for promoting growth of pancreatic islets in a patient in need thereof, comprising the step of delivering to the patient a pharmaceutical composition as claimed in Claim 10.

12. A pharmaceutically acceptable, acid addition salt of a GLP-2 peptide.

13. A pharmaceutically acceptable, acid addition salt of a GLP-2 peptide according to Claim 12, wherein said GLP-2 peptide is a vertebrate GLP-2 peptide.

14. A method useful to identify novel intestinotrophic peptides, comprising the steps of:

a) obtaining an analog of an intestinotrophic vertebrate GLP-2 peptide, the analog having at

least one amino acid substitution, deletion, addition, or an amino acid with a blocking group;

b) treating a mammal with said analog using a regimen capable of eliciting an intestinotrophic effect when utilized for rat GLP-2; and

c) determining the effect of said analog on small bowel weight and/or on the crypt plus villus height and/or pancreatic islet size relative to a mock treated control mammal, whereby said intestinotrophic peptide is identified as an analog which elicits an increase in said weight and/or said height and/or said size.

15. A method for treating a patient to restore gastrointestinal tissue, the gastrointestinal tissue selected from pancreatic islets and bowel tissue, which comprises the step of implanting in said patient cells that have been conditioned by growth in a GLP-2 peptide-containing medium.

16. A method for treating a gastrointestinal disease, wherein the gastrointestinal disease is selected from the group consisting of ulcers, digestion disorders, malabsorption syndromes, short-gut syndrome, cul-de-sac syndrome, inflammatory bowel disease, celiac sprue, tropical sprue, hypogammaglobulinemic sprue, enteritis, regional enteritis (Crohn's disease), small intestinal damage due to toxic or other chemotherapeutic agents, and short bowel syndrome,
and wherein the method comprises administering to a patient having the gastrointestinal disease a therapeutically effective amount of a GLP-2 or a GLP-2 analog together with a pharmaceutically acceptable carrier to reduce a pathological effect or symptom of the gastrointestinal disease.

17. A method for treating diabetes, comprising administering to a patient having diabetes a therapeutically effective amount of a GLP-2 or a GLP-2 analog together with a

pharmaceutically acceptable carrier to increase the levels of insulin in the patient.